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The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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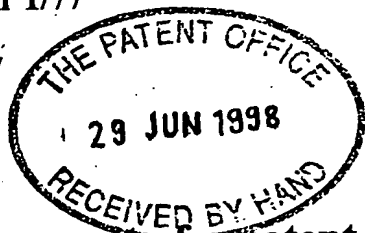
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Signed

*Evans*

Dated

16.01.2002



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Patent  
Office

30JUN98 E371872-9 002825  
P01/7700 25.00 - 9814014.8

The Patent Office

Cardiff Road  
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Gwent NP9 1RH

# Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

1. Your reference

87933/VRD

2. Patent application number  
(The Patent Office will fill in this part)

28 JUN 1998

9814014.8

3. Full name, address and postcode of the or of each applicant (underline all surnames)

STMicroelectronics Limited  
1000 Aztec West  
Almondsbury  
Bristol BS32 4SQ

Patents ADP number (if you know it)

If the applicant is a corporate body, give the state of its incorporation

United Kingdom

7460272 001

4. Title of the invention

DESIGN OF AN APPLICATION SPECIFIC PROCESSOR (ASP)

5. Name of your agent (if you have one)

PAGE WHITE & FARRER

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

54 Dough Street  
London,  
WC1N 2

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Patents ADP number (if you know it)

1255003

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number  
(if you know it)

Date of filing  
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing  
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

YES

- a) any applicant named in part 3 is not an inventor, or
  - b) there is an inventor who is not named as an applicant, or
  - c) any named applicant is a corporate body
- See note (d))

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1. A method of simulating an application specific processor (ASP) comprising:

defining a functional model in a high level language for simulating the architectural behaviour of the ASP, wherein in the functional model a CPU and a set of peripherals are defined;

generating for each peripheral an interface functions file which defines the communication attributes of the peripheral with the processor and the functional attributes of the peripheral in a manner independent of any particular data structure, and a test functions file which defines the communication attributes of the processor with the peripheral in a manner independent of any particular data structure;

simulating in the high level language as part of the functional model an application executable by the CPU and operations of the set of peripherals for a predetermined simulation phase, the application executable by the CPU including the test functions file and the operations of the set of peripherals including the interface functions file;

outputting the state of the application and the state of the peripherals at the end of the predetermined phase to a modelling file in the high level language;

converting the modelling file in the high level language to a simulation language for simulating the ASP at circuit level; and

simulating the ASP at circuit level using the simulation language for a subsequent simulation phase.

2. A simulation method according to claim 1, wherein the functional model in the high level language also simulates environmental stimuli which are also held in the modelling file at the end of the predetermined simulation phase in the high level language.

3. A simulation method according to claim 1 or 2, wherein the high level language is C.